AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (original) An optical reading device comprising a housing for receiving a test plate on which, according to a fixed pattern, test substances can be provided, which reading device further comprises optical conversion elements for converting light coming from a test substance into a measuring signal which corresponds to a predetermined parameter of the test substance, characterized in that the optical conversion elements comprise light-receiving areas configured in a pattern which corresponds to the pattern of the test plate.

2. (original) An optical reading device according to claim 1, characterized in that the housing comprises a base plate, in which the optical conversion elements have been received in a pattern which corresponds to the pattern of the test plate, which base plate has a shape such that it can be coupled to a test plate for providing a direct optical contact between the optical conversion elements and test substances on the test plate.

3. (currently amended) An optical reading device according to ~~any one of the preceding claims~~ claim 1, characterized in that the device comprises coupling means for coupling the test plate on the base plate.

4. (currently amended) An optical reading device according to ~~any one of the preceding claims~~ claim 1, characterized in that the number of conversion elements is equal to the number of test positions of a test plate to be read.

5. (currently amended) An optical reading device according to ~~any one of the preceding claims~~ claim 1, characterized in that the optically sensitive elements are designed for registering light coming from a chemo-optical substance, for measuring a degree of concentration of a substance to which the chemo-optical substance is sensitive.

6. (original) An optical reading device according to claim 5, characterized in that the optical elements register a half life of fluorescence light.

7. (currently amended) An optical reading device according to ~~at least one of the preceding claims~~ claim 1, characterized in that it has the size of a standard microtitre plate, so that the reading device can be included in an incubator and be read.

8. (currently amended) An optical reading device according to ~~at least one of the preceding claims~~ claim 1, characterized in that the reading device comprises a light source for- emitting excitation light, which light source emits light in a direction away from the light-receiving areas.

9. (currently amended) A method for testing test substances with an optical reader according to ~~any one of the preceding claims~~ claim 1, characterized in that

the method comprises the steps of providing the test substances in a microtitre plate, coupling the reader to the microtitre plate and inserting the reader into an incubator, while the measuring signals coming from the reader are stored in a memory of the reader and/or are outputted to a central processing unit.

10. (currently amended) A microtitre plate, characterized in that the microtitre plate is provided with coupling means for coupling the plate to an optical reader according to ~~at least one of the preceding claims~~ claim 1.

11. (original) A microtitre plate according to claim 10, characterized in that the microtitre plate is provided with a chemo-optical coating.

12. (original) A microtitre plate according to claim 11, characterized in that the coating is oxygen sensitive and that the microtitre plate comprises a closure for closing off the test substances in a gas-tight manner.